

IN THE SPECIFICATION:

On page 1, after the title, delete line 1 and insert the following heading:

Description

BACKGROUND OF THE INVENTION

On page 1, delete line 2:

~~Technical field~~

On page 1, lines 3-5, amend the paragraph to read as follows:

~~This~~ The present invention relates to a ~~safety~~ system
(method and apparatus) ~~for aircraft for preventing~~ The
~~object of the present invention is to prevent~~ improper use
of aircraft, ~~due~~ causing a crash on to a target ~~caused by~~
due to violence, for example.

On page 1, lines 6-15, amend the heading and paragraph to read as follows:

~~Description of the invention~~

SUMMARY OF THE INVENTION

~~This object is achieved by~~ The present invention concerns a safety system for aircraft, wherein prohibited airspaces which aircraft may not enter are marked on a digitally stored image of the airspace, wherein the aircraft is provided with an automatic control device, and wherein on approaching a prohibited airspace the control device automatically steers the aircraft on to an alternative route which is situated outside the prohibited airspace.

With the safety system according to the invention, an aircraft can be prevented from entering the airspace above and rear regions which are particularly at risk - hereinafter also termed prohibited regions. For example, these prohibited regions can be cities, nuclear power stations, or individual buildings or industrial installations which are particularly ~~at risk~~ critical or vulnerable to attack.

On page 3, lines 11-13, amend the paragraph to read as follows:

A method of identifying a risk of collision during air travel is described in EP 0 886 847 B1 and in US 6,201,482 B1, which is incorporated herein by reference.

Advantageously, this method is suitable for the safety system according to the invention, for which, in detail, the following is provided:

On page 5, delete lines 3-5 and insert the following paragraph and heading:

~~Brief description of the drawings~~

~~Examples of embodiments of the invention are explained in more detail in the description given below with reference to the drawings, which comprise a plurality of Figures, where:~~

For a full understanding of the present invention, reference should now be made to the following detailed description of the preferred embodiments of the invention as illustrated in the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

On page 5, lines 6-11, amend the paragraphs to read as follows:

Figures 1 to 4 are different cartographic representations, each ~~comprising~~ including a prohibited airspace~~;~~.

Figure 5 is a block circuit diagram of a safety system according to the invention~~;~~.

Figure 6 is a view from above showing an example of the coverage of volume elements by residence probabilities~~;~~and.

Figure 7 is a side view of the subject of Figure 6.

On page 5, delete line 12 and insert the following heading and paragraph:

~~Ways of carrying out the invention~~

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The preferred embodiments of the present invention will now be described with reference to Figs. 1-7 of the drawings. Identical elements in the various figures are designated with the same reference numerals.

On page 6, lines 3-17, amend the paragraphs to read as follows:

In the examples of embodiments shown in Figures 3 and 4, the airspace is partitioned into volume elements 10, for which values of a residence probability of objects with which an aircraft can collide are stored in a databank. If an object is actually situated within a volume element, the probability is 1; that is to say, 100%. For objects in motion, the probability is calculated of their being situated in the corresponding volume elements at predetermined times. Details of this procedure are given in the aforementioned patents.

In the examples of embodiments of the safety system (method and apparatus) according to the invention which are

illustrated in Figures 3 and 4, volume elements which an aircraft should not enter are ~~covered~~ designated by a high probability, preferably 1. Moreover, enforced steering on to an alternative route is provided for. The particular residence probabilities for the volume elements which can be reached by the aircraft within the predetermined times are calculated for the "particular" aircraft in each case. If there is a volume element for which the probability that both the particular aircraft and the other object are situated there exceeds a predetermined threshold value, an alternative route is taken. In the safety system according to the invention, an object situated in the prohibited airspace 6'' is simulated by specifying a high probability there.

On page 9, after the last line, insert the following paragraph:

There has thus been shown and described a novel safety system for aircraft which fulfills all the objects and advantages sought therefor. Many changes, modifications,

variations and other uses and applications of the subject invention will, however, become apparent to those skilled in the art after considering this specification and the accompanying drawings which disclose the preferred embodiments thereof. All such changes, modifications, variations and other uses and applications which do not depart from the spirit and scope of the invention are deemed to be covered by the invention, which is to be limited only by the claims which follow.